

ABSTRACT:

An interventional magnetic resonance method and apparatus utilizing a microcoil which enable localization of an interventional instrument by detecting magnetic resonance signals from the surroundings of the microcoil under the influence of magnetic field gradients. The outstanding reliability and the high speed of the method are due to the application of spatially non-selective RF pulses in conjunction with a sequence of gradient pulses in non-collinear directions. The localization method can be used inter alia for angiography wherein the signal intensity is used to determine the amount of blood present in the blood vessel.